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Agriculture Memorandum No 610

Variation of Penman term "E_a" with height

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The data used in Ag Mem 609 was examined to ascertain the variation of E_a with height; using monthly 5-year means at the three stations and smoothing by weightings of $\frac{1}{2}$, 1 and $\frac{1}{2}$. Results:-

C = Carlisle E = Eskdalemuir G = Great Dun Fell.

Month	5 year means						
	Unsmoothed			Smoothed			Change mm per 100ft
	C	E	G	C	E	G	
Jan	0.77	0.51	-0.03	0.84	0.60	-0.02	0.032
Feb	1.14	0.76	0.12	1.21	0.92	0.09	0.042
Mar	1.81	1.65	0.14	1.64	1.44	0.19	0.056
April	1.81	1.69	0.38	1.90	1.72	0.47	0.055
May	2.35	1.85	1.00	2.30	1.97	1.00	0.048
June	2.69	2.50	1.64	2.50	2.24	1.30	0.045
July	2.26	2.11	0.92	2.32	2.12	1.15	0.045
Aug	2.06	1.77	1.13	2.01	1.78	0.95	0.040
Sept	1.86	1.48	0.64	1.82	1.50	0.67	0.042
Oct	1.51	1.26	0.28	1.45	1.21	0.33	0.042
Nov	0.93	0.86	0.11	1.01	0.90	0.08	0.036
Dec	0.69	0.62	-0.16	0.77	0.65	-0.06	0.032

Applying separately the changes of wind and vapour pressure with height does not give these answers, which are regarded as being more reliable.

Any comments or suggestions on this paper should be referred to the author.

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